Somewhere Else

I have a love affair with spring. I delight in cool weather, windows cracked just enough so that you fall asleep with the frogs. I savor the return of our bird life, and the annual struggle it presents to refresh your memory on the songs. You know you recognize that song, but to whom does it belong? I relish the departure of the ice, and the sights and sounds of open water. It might seem odd to some, but there's nothing quite like seeing waves again. And there's all kinds of wildlife that live in and around water.

One especially nice day last week, I positively could not stand it anymore, and called the man to suggest that there would surely be better ways to spend that evening than watching him split firewood in our muddy driveway. He could see the beauty in that, and suggested we go "tailgating". We found ourselves a nice picnic spot alongside one of the waterfowl impoundments in the Chippewa National Forest. While he set up the grill, I settled into my lawn chair with my binoculars and bird book, and got ready to watch the show.

In the 1960's and 1970's, quite a few waterfowl impoundments were built on the Chippewa. Special funding was available for wetland enhancement, and impoundments provide habitat for an impressive array of wildlife, including 167 species of birds, 44 mammals, and 14 reptiles and amphibians. Of the 308 vertebrate species that live on the Chippewa, 70% have been found in water impoundments, or their close relative, the beaver flowage.

Although there is considerable variability among impoundment sites, the typical impoundment has a past history of flooding by beaver, and the man-made dam is often a replacement of a previous beaver dam. Generally designed to contain 40 – 50 surface acres of water, most impoundments are about 18 – 24 inches deep over about 75% of the site. It's intended that vegetation consist of a variety of submergent and emergent aquatics, including a fringe of shrubs.

A newly flooded area is highly productive for a number of years, but productivity drops off with time and stabilizes at a lower level if water depth is constant. This is the rationale for water level management in impoundments. Mechanical spillways were designed to permit a variety of water levels, including complete dewatering. Each site has a management plan designed to produce a sustained high level of productivity. Partial and complete drawdowns are employed to manage the vegetation, and provide for nutrient release that benefits aquatic life and keeps the area

productive. If you're a duck hunter and hunt beaver ponds, you understand this. Fresh beaver ponds hold a lot more fowl than do older ones. It's all related to nutrients and food source.

Man-made structures have a useful life, and particularly so for structures that involve water. The useful life of these structures was anticipated to be about 30 years, and we have seen a gradual decay of materials. This has been compounded by abundant and chronic beaver issues. Although Forest Service engineers were highly creative in designing quite a variety of water control structures, it's pretty tough to beat the constant efforts of beavers. They are drawn to running water, and they are driven to dam it up. The mud and sticks were a continual battle at most sites, and despite the determined efforts of staff, some sites eventually became inoperable.
Over time, a new focus helped bring about the removal of structures no longer filling their purpose. The best sites were kept as impoundments, and these continue to receive water level management. Some have been modified to provide for fish passage.

My picnic was at one such site. As we pulled in, an osprey flushed from a tree nearby the stair-step fish pools. He and an eagle had been capitalizing on the perch moving through the rocks. There's beavers at work in this impoundment right now. They've set up camp in the earthen dam, with a food pile nearby.

From my lawn chair, I can see a half dozen ring-necked ducks, a few wood ducks, and a green-winged teal. On a tiny island nearby, a couple of Canada geese hunker down low, necks stretched out as if to hide. They remain that way until two other geese venture close, and then all heck breaks loose, as the island pair chase off the interlopers, with much honking and flailing about. I wonder how many times a day this scene might play out.

I know geese nest in this spot year after year, although I have to wonder just how many goslings make it to maturity here. There's an eagle nest on this impoundment, and one year I arrived to find Ma and Pa Goose huddling in close to the earthen dike, with 8 tiny goslings about them, while an eagle made dive after dive. A few weeks later, I saw only a couple of larger goslings.

On picnic night, I was watching the mating flights of the mallards, just 2 or 3 birds at a time, and hadn't realized how many birds were hidden in the sedges until the eagle flew overhead. Then a few dozen puddle ducks got up. Many of these birds were darker, and I realized quite a few of them were black ducks. They sound just like mallards, but the drakes lack the green head of a spring mallard, and they have no white bars on their wings or tails.

Once the most abundant dabbling duck in eastern North America, the American black duck hasn't been doing so well in recent years. The continental population of black ducks is now half of its historical size. A variety of factors apparently contributed to that decline, including loss or alteration of habitat, overharvest, competition from mallards, and hybridization with mallards. We are at the southern edge of the black duck's range. In Minnesota, black ducks mostly breed in the northern boreal forests of the state, nesting in sedge meadows and bogs. Wetlands created or altered by beavers are heavily used by black ducks in forest habitats. Newly created or reflooded beaver meadows are rich in invertebrates, which are an important source of food for growing ducklings.

Beaver ponds are plentiful on the Chippewa National Forest. The Chippewa's landscape is rich with wetlands and water, and our abundant aspen forests provide the food resource. The road system crosses water in many places, providing constrictions that beavers capitalize on in their damming of water. These beaver ponds benefit a whole host of wetland species.

Fish passage and obstructions are sort of the yin and yang of aquatic life. Dams, be they man-made or beaver built, interrupt the instream movement of all sorts of aquatic organisms. So the current emphasis of the Chippewa's impoundment program involves removing those aging structures that no longer provide good water management opportunities in favor of returning the flow of water and creatures that live in it. I'm sure it does a fish biologist's heart good as they pull out these dams and watch the water go. I can appreciate that.

Don't tell them, but I am perhaps a little biased in that I also rejoice a tiny bit when I see that at many of these sites, try as we might, the water tends not to flow unimpeded for too many years before our furry engineers are back at work bringing their sense of order to the world. It's absolutely amazing what they can do, and they have all night, every night to work on it. Smaller culverts make their jobs easy, but even the largest culverts can gradually be filled in, if the rodents stick with it long enough.

Perhaps that was a smile on my face the other day as I pulled up to a spot along a Chippewa road that currently has quite a few new beaver ponds along it. Most of them sported at least a pair of Canada geese, the watch dogs of the world with their noisy honking. For the second year in a row, I rounded a particular bend to find a sandhill crane working a wetland edge. I especially laughed at the sight of a porcupine up a beaver chewed tree, its base well on the way to surrender. I thought of my spouse, the logger, and sent him a photo with a teasing text wondering which rodent would take out the tree first. I find loggers tend to rejoice less in this sort of tree drama than do biologists.

This particular spot was at one time an impoundment, but the water control structure gradually aged and years and years of beaver wars led to the eventual throwing in of the towel, so to speak. The structure was removed and replaced with one of the largest culverts I've seen on our Forest, the thought being that no beaver could conquer this one. At first that seemed true, but then after a few years a dam appeared just downstream of the culvert, which considerably impeded the flow. I didn't pay attention for a while, and now I see that the top end of this big culvert is barely visible, the local beavers having not forgotten what it was they were about.

The smile came in as I parked for a bit, binoculars to my face, entranced with the opportunity to watch a pair of trumpeter swans working on their nest. How many times in your life have you done that? Nearby, a blue-winged teal scolded me, as a dozen ring-necked ducks busily popped in and out of the water as they dove for food, oblivious to the rest of the world in what looked to be a feeding frenzy. Staying a bit off from the fray skulked a pied-billed grebe, the tiny "water witch" with that enchanting 'kuk-kuk-cow-cow-cow-cow-cowp-cowp' call. Once you figure that bird out, you will never mistake it for anyone else. The day was warm enough to coax a snore out of the resident leopard frogs, mixed amongst higher voices of the spring peepers and comb-like calls of chorus frogs. Tree swallows flitted here and there, as overhead a snipe did his sky dance, his own funny little form of love offering to some lucky lady bird.

The beavers have won this round, for now anyhow, and the fish shall just have to swim around somewhere else.

by Kelly Barrett, Wildlife Biologist
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